

CLAIM AMENDMENTS

1. (currently amended) A heat-insulating [[layer]]
material with a melting point above 2500°C, a thermal expansion
 coefficient in excess of $8 \times 10^{-6} \text{ K}^{-1}$, and a sintering temperature
 greater than 1400°C, wherein the heat-insulating material has a
 perovskite structure of the general formula $A_{1+r}(B'_{1/3+x}B''_{2/3+y})O_{3+z}$ in
 which:

A = at least one element of the group (Ba, Sr, Ca, Be),

B' = at least one element of the group (Mg, Ca, Sr, Ba,
 Be),

B'' = at least one element of the group (Ta, Nb),

r, x, and z \neq 0, and

$-0.1 < r, x, y, z < 0.1$;

or the heat-insulating material has the perovskite
 structure of the general formula $A_{1+r}(B'_{1/2+x}B''_{1/2+y})O_{3+z}$ in which:

A = at least one element of the group (Ba, Sr, Ca, Be),

B' = at least one element of the group (Al, La, Nd, Gd,
 Er, Lu, Dy, Tb),

B'' = at least one element of the group (Ta, Nb), and

$-0.1 < r, x, y, z < 0.1$.

2. (currently amended) A heat-insulating material
 according to claim 1 wherein the heat-insulating material has a
~~composition wherein the perovskite structure of the general~~
formula $A_{1+r}(B'_{1/2+x}B''_{1/2+y})O_{3+z}$ and $r = x = y = z = 0$.

3. (canceled)

1 4. (currently amended) ~~The use of~~ A method of using
2 the heat-insulating material according to claim 1 comprising the
3 step of applying the heat-insulating material as a heat-insulating
4 coating on the surface of ~~[[the]]~~ a component.

1 5. (previously presented) The ~~[[use]]~~ method according
2 to claim 4, further comprising the step of providing, between the
3 component and the heat-insulating component, one or more
4 intermediate coatings of ceramic glass or metallic material.

1 6. (previously presented) The ~~[[use]]~~ method according
2 to ~~the preceding~~ claim 5, further comprising the step of
3 providing, between the component and the heat-insulating layer, an
4 intermediate layer comprised of a MCrAlY alloy where M = Co, Ni.

5 7. (currently amended) The ~~[[use]]~~ method according to
6 ~~the preceding~~ claim 5, further comprising the step of providing,
7 between the component and the heat-insulating layer, an
8 intermediate (platinum-) aluminide layer.

9 8 - 10. (canceled)